

Subcommittee Looks at National Science Board's Action Plan for STEM Education (October 10, 2007)

Washington, D.C. - As part of ongoing investigations into improving the country's science, technology, engineering and mathematics (STEM) education system for students and teachers, members of the Science and Technology Committee's Research and Science Education Subcommittee today heard from educators and other experts on how to guarantee students are receiving the best education possible.

On October 3, the National Science Board released a report, "A National Action Plan for Addressing the Critical Needs of the U.S. Science, Technology, Engineering, and Mathematics Education System," that includes steps on how STEM subjects are taught and on how to ensure teachers are qualified to teach these subjects. The plan proposes a series of steps that the Board believes will bring greater coherence to the nation's science, technology, engineering and mathematics (STEM) education system and ensure that students are taught by highly effective STEM teachers.

"Congress, the Administration, and business and industry all agree that bolstering STEM education is key to fostering innovation and discovery, and ensuring the nation's economic development and ability to compete in the global marketplace," Subcommittee Chairman Baird (D-WA) emphasized. "This effort is going to take collaboration and creativity as we support math and science education and our math and science teachers."

The hearing provided an opportunity for a range of stakeholders to give their response to the NSB recommendations, including the Board's proposal to create a congressionally chartered National STEM Education Council to help foster and guide STEM education improvements.

The National Academies Rising Above the Gathering Storm report upon which the Committee's groundbreaking legislation and now law, H.R. 2272 was based placed a major emphasis on the need to improve STEM education and made its top priority increasing the number of highly qualified STEM teachers.

Offering a state perspective, Judy A. Jeffrey of the Council of Chief State School Officers said, "The report rightly addresses state responsibility for STEM education and appropriately places emphasis on the critical need to recruit STEM teachers and develop their skills. I also agree with the report's recommendation that better coordination is needed among all federal departments and agencies involved in STEM education research and programs."

In the same period that the Gathering Storm report was being developed, the NSB initiated a process to explore how to improve STEM education throughout the nation. As part of this effort, the Board established a STEM education commission to advise it on how to accomplish this goal.

At present, there are no consistent STEM content standards in use among the states and no consistency in the sequence in which STEM courses are taught. A chronic shortage of highly qualified STEM teachers is a major

impediment to improved student performance in STEM subjects.

“Providing our teachers with the education and tools they need to make sure our children are getting the best education possible is fundamental for our economy, our national security, and the future of our country’s workforce,” continued Baird.

Witnesses at today’s hearing included: Dr. Steven Beering, Chairman, National Science Board; Ms. Judy A. Jeffrey, Director, Iowa Department of Education and Representing the Council of Chief State School Officers; Dr. Francis (Skip) Fennell, President, National Council of Teachers of Mathematics and Professor of Education at McDaniel College; Ms. Chrisanne Gayl, Director of Federal Programs, National School Boards Association; Dr. Robert Semper, Executive Associate Director, The Exploratorium and Representing the Association of Science-Technology Centers; and Ms. Susan L. Traiman, Director, Education and Workforce Policy Business Roundtable.

For more information on this hearing or the Committee’s work with science and math education, please visit the Committee’s website at www.house.gov/science.

###